

1928



Important Points in Ventilating the Potato Storage

R. D. ANTHONY, State College, Pa.

Absence of rots, firmness, and freedom from sprouts are three necessary conditions for good potatoes either for table stock or seed. The conditions which influence these are the important factors in storage.

ROTS—A potato in storage is alive and respire as does any living organism, giving off water vapor, carbon dioxide, heat and other by-products. Shut up the potato so that these end products of its life activity accumulate and the potato will die; remove these end products and the potato will continue to live for months. The best method of removal is by passing fresh air over each individual tuber.

When the air flow is too slow the moisture given off by the potatoes accumulates until the air is practically saturated. Slight decreases in temperature then cause this moisture to condense on the potatoes or on the ceiling above from where it may drip onto the potatoes. These conditions favor the development of rots. A dry potato with an uninjured skin will not rot. Proper air movement around each potato removes excess moisture.

SHRIVELING—This is caused by too great a water loss. The rate of water loss is increased by higher temperatures and by a more rapid movement of relatively dry air over the potato.

The humidity of the air is expressed in terms of total saturation. When the humidity reaches 100% the moisture begins to precipitate as dew. The warmer the air the more moisture it takes to bring it to saturation. Outside air, when the temperature is below freezing, has had the moisture frozen out of it.

When we bring this air into a storage and warm it to 40°, it will pick up a large quantity of water. If this moisture is not supplied from the damp earth floor it will be taken from the potatoes and they will shrivel.

The more rapid the air flow into the storage the more rapid the loss of moisture from the floor and the lower the humidity of the air moving around the potatoes. To increase the humidity slow down the ventilation. So long as the dirt floor is kept moist there is little danger of the humidity falling to a point which will cause shriveling. A humidity range of from 85 to 95 percent can usually be maintained.

SPROUTING—The rate of ventilation around the potato influences the time of germination; the more rapid the air flow the later the sprouting. In the same storage, potatoes in deep bins will sprout earlier than those in slat crates.

METHODS OF STORING—A storage may be well built with the proper ventilation yet the results be unsatisfactory if the potatoes are so stored that air movement around them is checked. The first step in successful storage is the use of a slatted floor. A few homes have used bin storage successfully but the danger of unsatisfactory results is too great to recommend this. Furthermore, when the extra cost and the loss from bruising are considered, the use of bags or crates is more economical.

Although sack storage is satisfactory if the sacks are so placed as to permit air movement around them, under Pennsylvania marketing conditions the slat

(Continued on Page 3)

THE GUIDE POST

Published bi-monthly by the Pennsylvania Potato Growers Association.

OFFICERS

R. W. Lohr	President
Jacob Wile	Vice-President
Miles Horst	Sec'y-Treas.
L. T. Denniston.....	Asst. Sec'y Treas.

DIRECTORS

J. L. Reitz	Union County
Lewis Downing	Chester County
Chas. B. Patton.....	Lawrence County
J. A. Farabaugh	Cambria County
Amos Eberly	Lancaster County
E. R. Bloss,	Potter County
R. W. Lohr	Somerset County
Jacob S. Wile	Montgomery County
Miles Horst	Lebanon County
W. S. Weaver	Lehigh County

All communications should be addressed to Miles Horst, Secretary-Treasurer, 309 Telegraph Building, Harrisburg, Pa.

OUR SUMMER TOUR

We are going to northern Michigan this summer on our annual potato tour. Arrangements are being made for a special train with dining and pullman accommodations. We will leave on Monday, August 20th, and be back, Friday, the 24th. The total expenses for this trip, including carfare, pullman berths and meals will be under \$75.00 from Philadelphia, and the total cost will decrease from points farther west in the State dropping to about \$50.00 from Pittsburgh. The exact rates cannot yet be given for the course to be taken has not yet been definitely decided. We will have a full day in the potato fields of northern Michigan where we will be met by the Michigan Potato Growers' Association who will transport us through the potato belt in their cars and who have invited us to a banquet and meeting in the evening, probably at Petoskey. We will spend a part of the day on the Straits of Lake Michigan, the summer

playground of people in the central west. Stops will be made at points of interest along the route.

At the urgent request of a number of men taking previous tours, we are arranging this year to take the ladies along on this tour to Michigan. A doctor and a nurse will accompany the train to take care of any folks who may need their assistance. We are trying to make the arrangements as comfortable as we can so that everybody going will have a good time and at the same time see how potato growers function in Michigan.

Louis Reitz of Lewisburg already has made reservations for himself and wife, so have A. C. Kepler and his wife of Pine Grove Mills, and so has Thomas Denniston of Butler county. The number going will have to be restricted to 200, as this will fill the special train. So it is necessary for those wishing to go to report early to the Secretary at 309 Telegraph Building, Harrisburg, to Dr. E. L. Nixon, State College, or to the local County Agents who in turn will report the same to the above two parties.

A. L. Hacker, County Agent of Lehigh county, writes that sometime ago he visited a Chain Store in Allentown where he found Florida redskinned potatoes selling at 3 lbs. for 29 cents, and Idaho baking potatoes at 3 lbs. for 14 cents. There wasn't a Pennsylvania potato sold in this store operating in the most concentrated potato belt in Pennsylvania. Mr. Hacker's observation in an Allentown store could be duplicated in many other stores throughout Pennsylvania. Why are not Pennsylvania grown potatoes sold in these stores? They are just as good in quality and just as appealing to the eye. Is it that our competitors are better salesmen thus getting their product into many of our own stores?

The Secretary wishes to express his appreciation to the Portland Cement Association for the use of a number of their cuts appearing in this issue.

PROVIDING MORE STORAGE SPACE

J. L. Reitz of Lewisburg, who appears in the picture to the right, is building a new storage cellar 30'x10'x120'. He is building this new storage cellar because his experience with the cellar he built two years ago has been very satisfactory. For the benefit of the readers of the Guide Post we have asked him for details on the old storage. He tells us that the total cost of building that storage two years ago was \$2320.00, including the following items:

Cost of cement	\$600.00
Lumber	475.00
Steel reinforcing	350.00
Movable forms	95.00
Stone and sand	265.00
Labor	500.00
Hardware, Wiring, Etc.	35.00

2320.00

This storage constructed two years ago is 30'x10'x80' and has a capacity of 8,000 bushels. The walls are double concrete walls with two inches air space in the middle. The entire building is underground with the exception of the ends where the large driveway doors occur.



J. L. Reitz on the right

Mr. Reitz says the building was paid for the first year due to increased price of selling the stored crop. These facts, with the demand for increased for both potatoes and apples, has convinced Mr. Reitz that it will be profitable for him to increase his storage capacity. The new storage will have a capacity of 20,000 bushels and is built on the same lines as the storage now in use.



Excavating for the new cellar

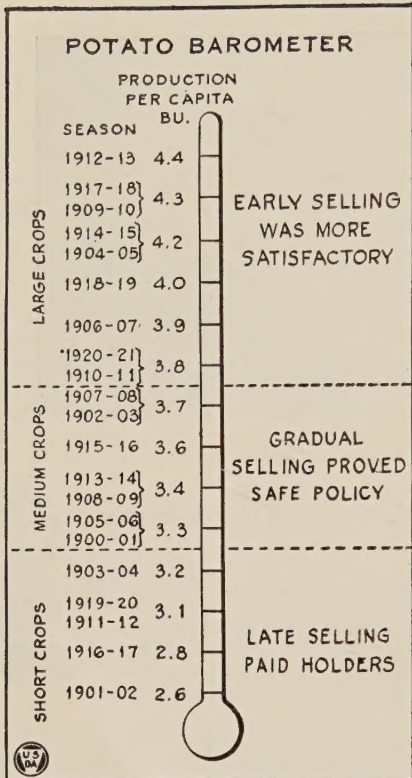
Important Points in Ventilating the Potato Storage

(Continued from Page 1)

crate is usually the most satisfactory and most economical storage package.

AMOUNT OF VENTILATION—No rules can be set down for the time and amount of ventilation. Each storage is

a special study. Certain conditions guide us in this study. A dripping roof means either too little insulation or too little ventilation or both. A dusty floor means too much ventilation or too slow seepage of moisture from the surrounding soil. If your potatoes rot or shrivel, don't condemn the storage; it may be a good storage but not properly handled.



Relation of size of crops and selling policy.

POTATO STORAGE

By N. S. Grubbs

INTRODUCTION

With the advancement in potato growing practice comes a corresponding need for information on the subject of farm storage cellars. How to design the cellar and how to construct them are questions uppermost in the minds of farmers desiring to increase their storage capacity.

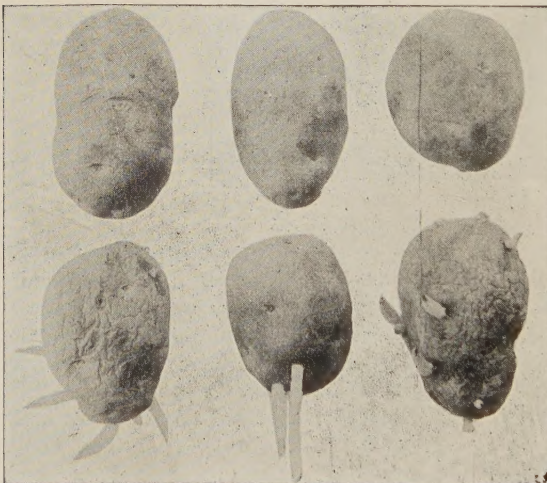
WHEN TO STORE

Crop conditions present a new situation each season. There is no available "best time" to sell. With adequate storage facilities the producer can store or sell according to the trend of the crop market. In Pennsylvania, the large number of local markets and our system of good roads make it possible in a great many cases to store the crop and sell it at various times through the winter season. A wide variety of crop news is made available by our State Bureau of Markets and the Federal Department of Agriculture. In addition to this the Agricultural Extension Service and weekly articles appearing in our farm papers contribute information as to the advisability of selling the crop.

CAREFUL HARVESTING

Careful harvesting is the first step in successful storage. Potatoes that are

(Continued on Page 6)



The potatoes in the bottom row were taken from an ordinary residence basement on April 20. Note the well developed sprouts and the shrivelled skin; under such conditions shrinkage is very heavy. Those in the upper row are still sound and dormant after being held until the same date in a modern concrete storage cellar.

Select Your Seed This Summer

for next Spring's planting. See our russets and white rurals growing in the fields. Our 250 acres will please you. Combine business with pleasure and plan your vacation trip thru the beautiful Genesee Country in western New York, where our fields are located.

LEWIS A. TOAN

PERRY, N. Y.

MR. J. B. R. DICKEY, in the leading article of the February, 1928, Guide Post, said . . .

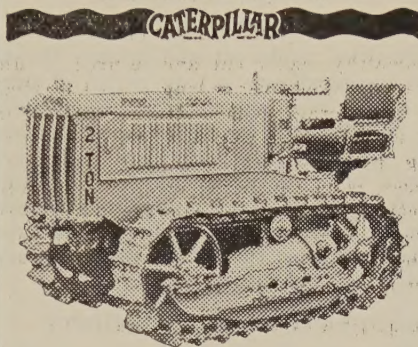
"Spraying was undoubtedly the most important single factor in producing the 1927 crop."

For your spraying or dusting select "Bell-Mine" Lime in pebble or pulverized form. It is pure high calcium lime of exceptional fungicidal value and does not clog spray nozzles.

Our authoritative book on Spraying and Dusting will be sent to any potato grower on request.



AMERICAN LIME & STONE CO.
BELLEFONTE, PA.



From Seed Bed to Harvest

Early in the season, when the soil is too soft for other forms of power, "Caterpillar" tractors prepare deep, mellow seed beds. They pull planters, cultivators, sprayers and diggers, and do a hundred and one odd jobs about the farm. With a "Caterpillar" you have power that is available at a turn of the crank—dependable, economical and armored against time.

New agricultural folders will soon be ready for distribution. May we place your name on the mailing list?

BECKWITH
MACHINERY COMPANY

Distributors for Pennsylvania

500 Arch St., N. S., PITTSBURGH
Front & Brown Sts., PHILADELPHIA



POTATO STORAGE

(Continued from Page 4)

unhealthy, badly cut and injured should not be stored over a long period of time in any storage cellar. It has been found in practice that the best means of storing potatoes, especially for seed purposes, is in ventilated crates. The bulk method is proving satisfactory where proper ventilation and humidity is supplied and when the pile of potatoes does not exceed six feet in depth.

TEMPERATURE AND HUMIDITY

If possible, the ideal temperature for storing potatoes is from 34 to 40° F. Ample ventilation will control the humidity and prevent condensation of moisture on the walls and ceiling. Enough ventilation should exist to carry off excess moisture, but enough moisture should be present to keep the potatoes from withering and drying out.

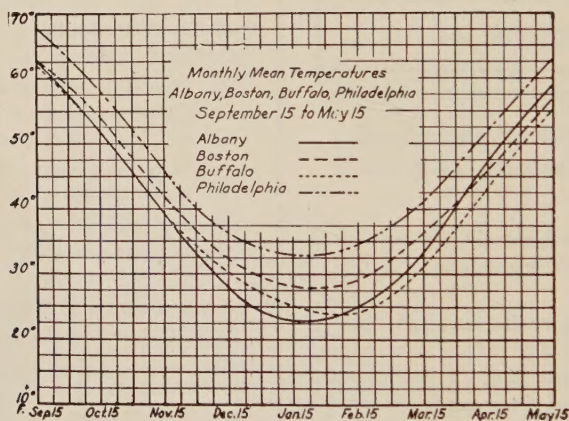
LIGHT

When potatoes are stored as table stock, light should be excluded since it causes a chemical reaction in the tubers which injures their flavor. It has been found in the storage of seed potatoes that a little sunlight is not objectionable.

Since an important phase of storage is the selecting of a proper design, two plans are herein submitted.

The first plan is an underground type storage in which a driveway is provided through the middle of the storage. The second plan calls for filling storage through the roof and removing the crop at the side doors making it possible to handle the crop without much lifting.

Both types are satisfactory and the cost is relatively the same depending on whether or not the storage is contracted or is built by the farmer himself. Generally speaking the cost per bushel storage capacity will vary from 25c to 60c per



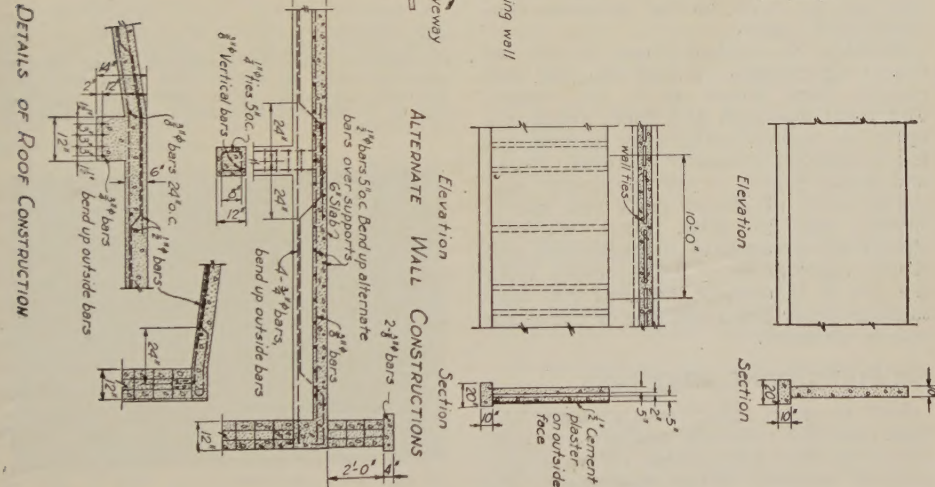
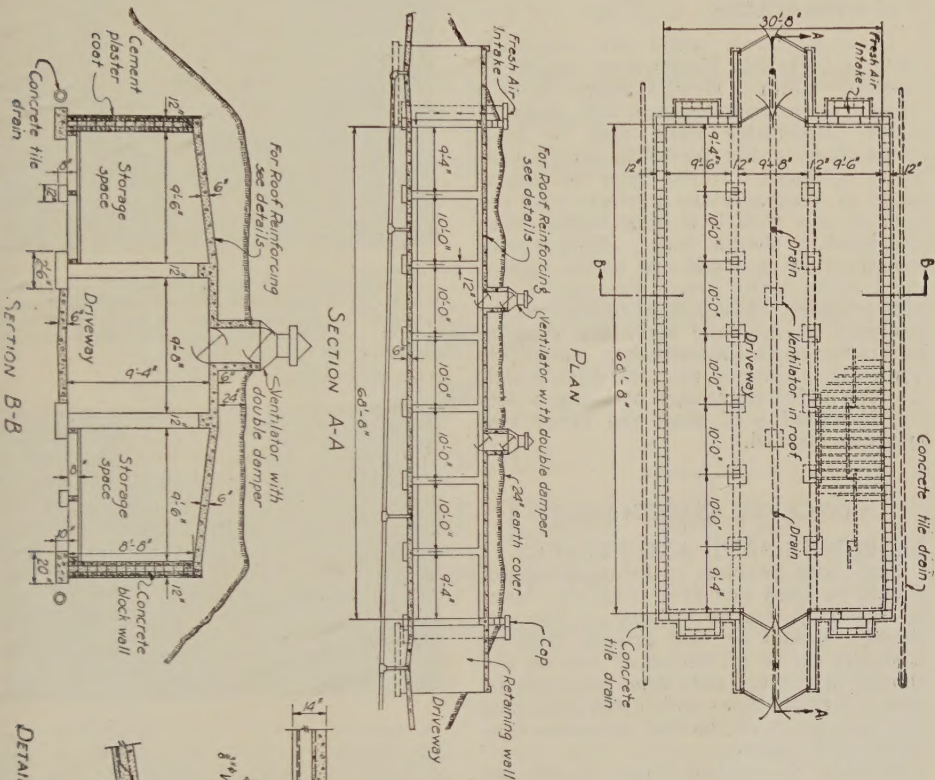
The above illustration is a chart based on the average temperatures of the various cities in the northeast section of the United States. The average temperature for each month can be taken from this chart and applied to the local conditions. It has been found, however, that the temperature in Pennsylvania is suitable for common storage and that an important feature of storage is the design of the building, the operation and control of temperature and humidity during the storage period.

bushel. Usually 2½ cubic feet of space is required to store one bushel of potatoes.

STORAGE CONSTRUCTION

Whenever possible a storage house should be located on a hillside capable of being drained thoroughly. In excavating, it would be advisable to pile the dirt around both sides of the excavation so that labor will be saved in covering and banking the storage when the construction is completed.

(Continued on Page 8)



POTATO STORAGE

(Continued from Page 6)

TYPE OF WALLS

Concrete block walls are relatively easy to build and blocks may usually be secured within a short distance from a dealer or a manufacturer of standard block. Monolithic walls may be built using lumber for forms in which concrete is placed. It has been the experience of a great many growers that the cost of this wall is a little higher than the block or double wall. Hollow wall construction is made by using special steel forms which are on the market for that purpose. These steel forms may be operated quickly and serve the purpose of lumber as in the case of a monolithic wall. It is claimed that the double wall has the added advantage of being a better insulated wall than the other two types mentioned.

CONCRETE INFORMATION

SELECTING SAND AND PEBBLES

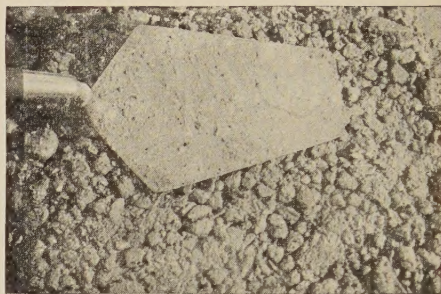
Sand and pebbles, called aggregates, should be hard and free from silt, loam or vegetable matter. Sand or fine aggregate should be well graded, that is, it should not be all fine or all coarse, but should vary from very fine, exclusive of dust, up to particles which will just pass through a sieve having meshes one-fourth inch square.

Pebbles or crushed stone, known as coarse aggregates, should also be well graded from $\frac{1}{4}$ inch up to $1\frac{1}{2}$ inches. For walls, footings and floor, aggregate up to $1\frac{1}{2}$ inches in size may be used but for reinforced concrete columns, beams and slabs $\frac{3}{4}$ inch is the maximum size permissible. Ordinary bank run gravel should not be used. Such material should be screened to separate fine and coarse aggregates. As it comes from the pit, it is usually not uniform, containing either too much fine or too much coarse material.

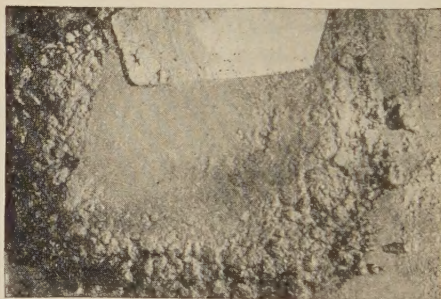
PROPORTIONING MIXTURES

For storage cellar construction, the recommended concrete mixture contains not more than $6\frac{1}{2}$ gallons of water per sack of cement. When aggregates are moist, this amount of water should be reduced to five gallons since the water contained in the aggregates is free to

(Continued on Page 9)



A concrete mixture in which there is not enough cement-sand mortar to fill the spaces between the pebbles. Such a mixture is hard to work and results in rough, honey-combed surfaces.



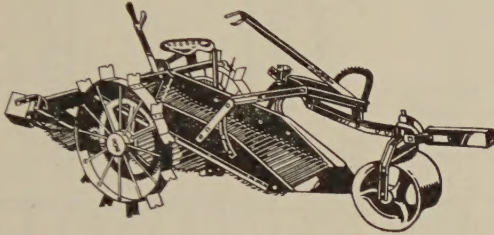
A concrete mixture which contains the correct amount of cement-sand mortar. With light trowelling, all the spaces between the pebbles are filled with mortar. Note appearance at edges of pile. This is a workable mixture and will give maximum yield of strong, dense concrete from a given amount of cement.



A concrete mixture in which there is an excess of cement-sand mortar. While such a mixture is plastic and workable and will produce smooth surfaces, the amount of concrete obtained from a bag of cement will be low. Such concrete is also likely to be porous

Digging Satisfaction and Service

The world famous line of McKenzie Planters, Sprayers and Diggers is standard equipment with some of the most successful potato producers of Pennsylvania.



Manufactured by
McKENZIE MANUFACTURING CO.
LaCROSSE, WIS.

SOLD BY

Oliver Chilled Plow Works

HARRISBURG, PA.

POTATO STORAGE

(Continued from Page 8)

act on the cement. When aggregates are wet, the proper quantity of water to add per sack of cement is $4\frac{1}{4}$ gallons. Adding more than these quantities of water will weaken the concrete and increase its porosity.

For the first batch, a trial mixture of one part cement, $2\frac{1}{2}$ parts sand and $3\frac{1}{2}$ parts pebbles or crushed stone is suggested. If the recommended amounts of water give a mixture which is too harsh or stiff to work well, the proportion of sand to pebbles should be changed or the amounts of both decreased. If too sloppy, add more sand and pebbles until the proper workability and consistency are obtained.

MIXING

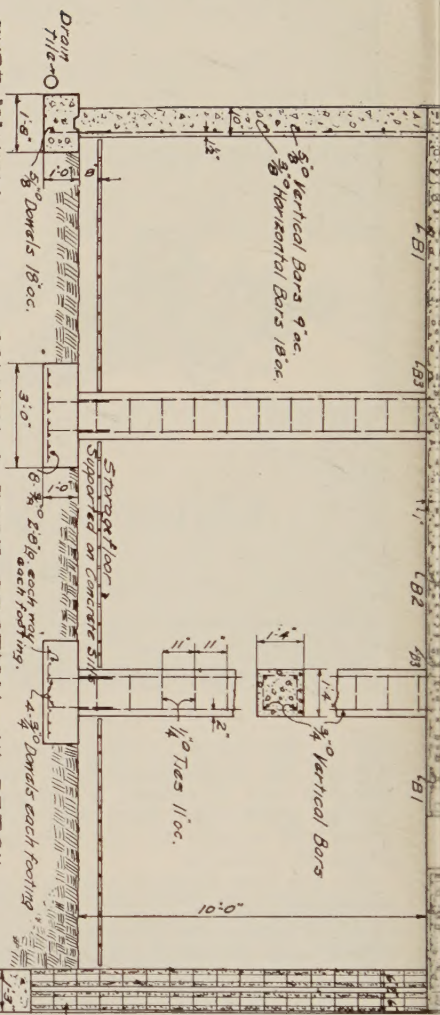
Machine mixing is recommended for storage house construction because by this method much heavy labor is saved and thorough mixing and uniform batches are more easily obtained.

The machines should be run not less than two minutes after all materials, in-

cluding the water, are in the drum. A small batch type mixer is relatively inexpensive and will quickly pay for itself where much concrete work is contemplated. It can also be used in mixing feed and fertilizer at home.

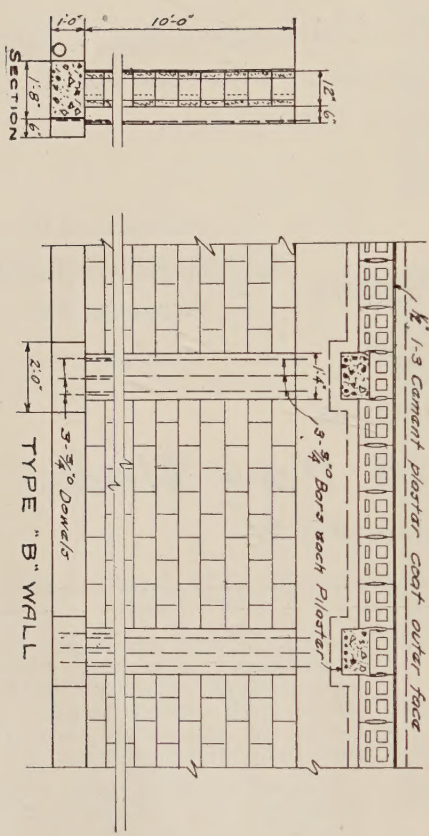
Concrete should be placed in the forms immediately after mixing in 6 to 8-inch layers and tamped and spaded as it is deposited so that it will settle thoroughly in the forms and produce a dense, impervious wall. By spading is meant the working of a spade or chisel-edged board in the concrete. Moving the spade up and down and to and fro forces the large pebbles away from the form face and leaves a smooth, dense surface.

After concrete has hardened sufficiently to be self-sustaining the forms may be removed. Since the proper hardening of concrete requires moisture, the finished wall should be protected from the sun and wind and kept moist for 10 days to two weeks to prevent its drying out. Walls may be kept moist by hanging over them canvas or burlap which is kept moist by sprinkling as often as may be required.



TYPE C WALL

COLUMN & ROOF SECTION - XX - DETAIL



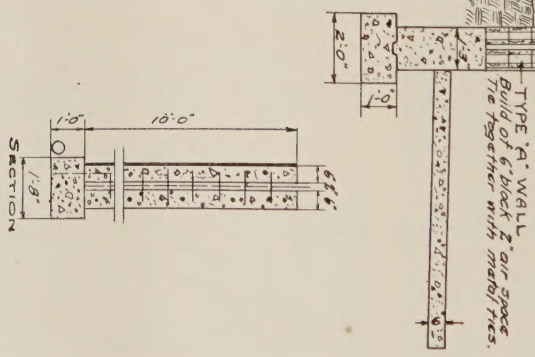
SECTION

TYPE "B" WALL



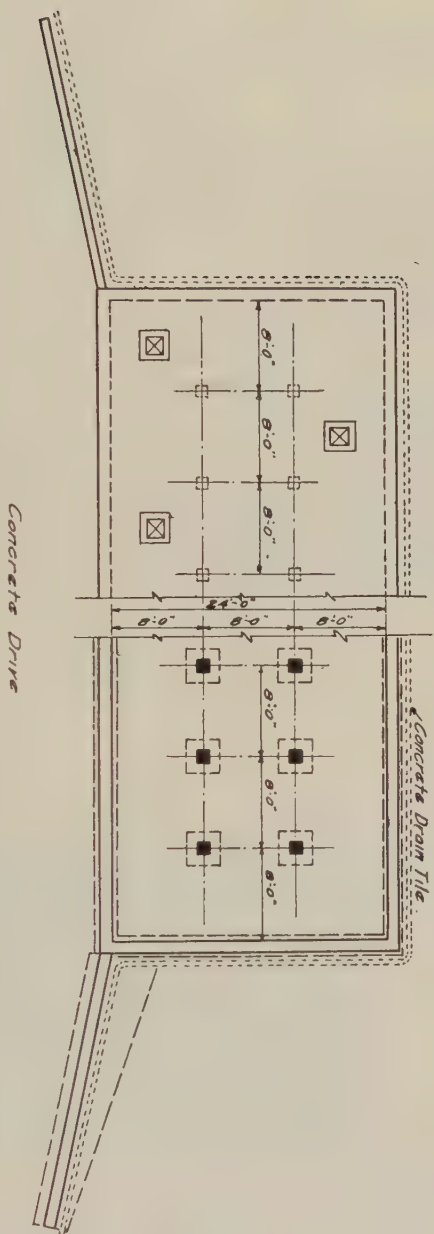
1. Use 5 stepping
1/2" diameter bars
together with
2-1/4" bars.

SECTION THRU DOOR LINTEL



SECTION

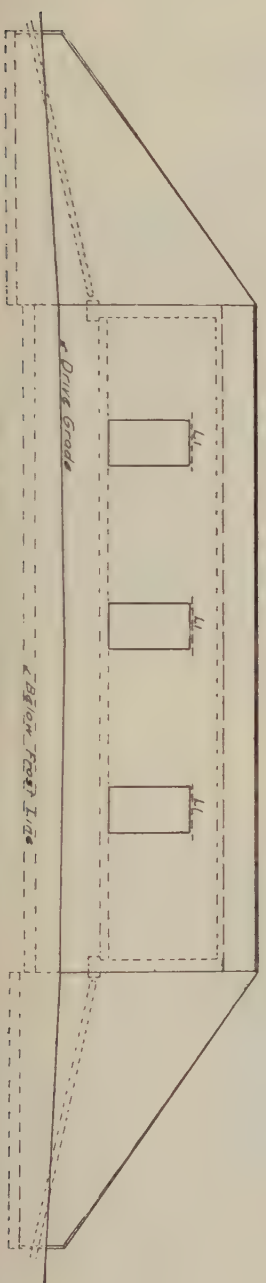
TYPE "A" WALL
Build of 6" brick 2" air space.
The together with metal ties.



PART ROOF PLAN PART FOUNDATION PLAN

Concrete Drive

Concrete Drain Tile



FRONT ELEVATION

12'0" 24'0"

ROOF SLAB

The roof slab for underground storages is of reinforced concrete of standard design. Instructions for placing such a slab appear on the blueprint shown in this issue.

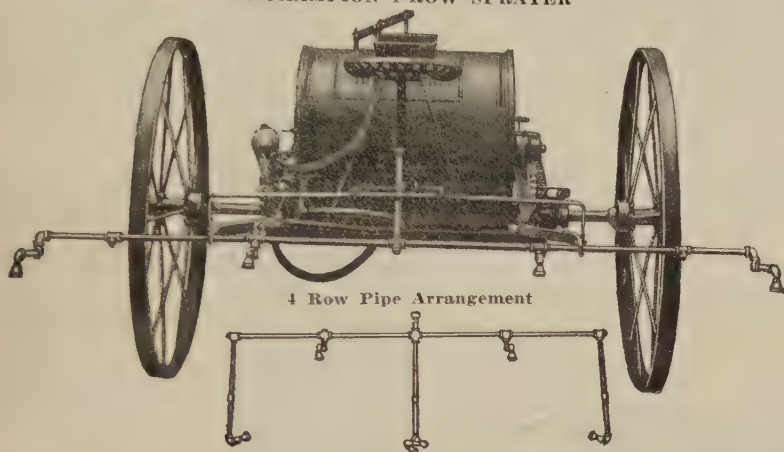


Placing the reinforcement on the completed roof form



Storage under construction of the type with a driveway running through the middle

O K Champion Line Potato Planters, Sprayers, Potato Diggers, Tillers and Orchard Harrows
OK CHAMPION 4-ROW SPRAYER



Two Row—2 or 3 Nozzle Pipe Arrangement

The Four-row Sprayer has proven its merits for many years. Our all-brass, double acting, bronze ball valve Force Pump is a marvel in performance.

The Sprayer comes regularly equipped with pipe arranged for four rows, one nozzle to the row. The same pipe may be arranged to spray two rows, 2 or 3 nozzles to the row, as shown above.

We invite your inquiry so that we can explain this Sprayer more fully. Address:

CHAMPION CORPORATION

Sheffield Ave.,

Hammond, Indiana

“KNO KORE”

Spray Lime
LUMP OR PEBBLE

We furnish Copper Sulphate
We ship Mixed Cars
Get our Price First

Ask the potato growers who use this Lime.

They are easy to find.

CHEMICAL LIME CO.


BELLEFONTE, PA.

Eureka Potato Machines


Make Money for Potato Growers

Eureka Potato Machines take hard work out of potato growing. They reduce time and labor costs. They assure bigger yields.

<p>Potato Cutter Cuts uniform seed. Operates with both hands free for feeding.</p>	<p>Potato Planter One man machines doing five operations in one. Over twenty-two years' success.</p>	<p>Traction Sprayer Insures the crop. Sizes, 4 or 6 rows, 60 to 100 gallon tanks. Many styles of booms.</p>
---	---	--



POTATO CUTTER




POTATO PLANTER


Riding Mulcher
Breaks crusts, mulches soil, and kills weeds when potato crop is young and tender. 8, 10 and 12 ft. sizes. Many other uses, with or without seeding attachment.

Potato Digger
Famous for getting all the potatoes, separating and standing hard use. With or without engine attachment or tractor attachment.


All machines in stock near you. Send for complete catalogue



POTATO DIGGER



TRACTION SPRAYER



RIDING MULCHER

Used by many of the most successful growers in Pennsylvania and elsewhere.

Also ask for folders of

Two Row Fertilizer Distributor

Two Row Potato Planter

Engine Driven Sprayer

EUREKA MOWER CO.
UTICA, N. Y.

POTATO MACHINERY

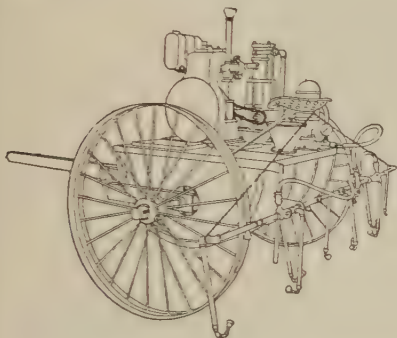
Never before have potato growers in Pennsylvania bought improved potato machinery in as large quantities as they are doing this spring, particularly is this true of Weeders and Sprayers. This heavy buying of these two tools is true in practically every county of the state, particularly in the heavier potato growing counties. County Agents report that the width of Weeders most generally used is 10 to 12 feet, and the 6-row Power Sprayer is the one that is beginning to dominate in the purchases. Thirty-nine of the 47 County Agents replying to the questionnaire sent them state that, the 6 row Power Sprayer is showing a decided increase in purchase in their counties. This same questionnaire reveals that not only the 400-bushel growers but growers in general are cutting down on their distance between rows, in most cases from 30 to 32 inches in the row. Several counties indicate a heavy purchase of the combined Scorer and Fertilizer Drill, although this tool does not figure nearly as heavy in purchases of machinery as

do the Weeder and the Sprayer. In line with the Power Sprayer is coming also the Power Digger. Over one-half of the County Agents reporting state that purchases of the Power Diggers are on the ascension as compared with the traction digger. In Delaware county a number of growers have devised vine lifters in order to prevent the Sprayer wheels from cutting the vines. In Butler county a number of the growers have purchased Orchard Cultivators, none were in use here before this year. In Lancaster county there is a distinct effort on the part of growers to pipe their water to the field. In Lehigh county Mr. Hacker reports that growers are working hard on a Picker or elevator to attach to Diggers in order to eliminate hand-picking. In Monroe county several men have mounted their Sprayers on Ford Chassis. It will be interesting to see how these men make out. In Montgomery county there is a distinct tendency toward two-row planters; the same is reported from Somerset county. From York county is reported a strong demand for mechanical Cutters.

a rig specially made for spraying potatoes

It **PAYS** to spray potatoes often. But it doesn't pay to buy a new sprayer every few years—and you don't have to if you invest in a Mount Gilead Potato Sprayer.....This rig is **SPECIALLY BUILT FOR POTATO SPRAYING**—built to do a one hundred per cent job year after year.

As far as truck and tank are concerned, the Mount Gilead Potato Sprayer has all the desirable features found on other good row crop sprayers. In addition, the Mount Gilead has a **steel frame, electrically welded**. There are no bolts and nuts to work loose.



The pump, the important part of any sprayer, is fully enclosed, dust-tight and self-oiling. It is the simplest, most accessible and best spray pump made. With oil in its crankcase, it will require no other attention during the season. It is the **only pump** in which all wearing parts in the pumping end are made of **Stainless Steel**. Mount Gilead Stainless Steel Cylinders are guaranteed to outwear two sets of porcelain lined cylinders.

The pump is driven by a New Way air cooled engine—the same fine engine that is used on so many potato diggers. If you have a digger powered with a New Way, you can save money by buying the sprayer **without** the engine.

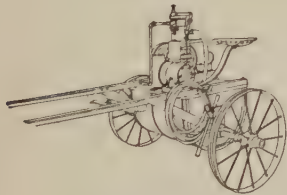
Furnished with either 4 or 6 row Nixon boom with 3 non-clog nozzles to the row. Material is strained 3 times before reaching the nozzles. A **modern** sprayer in every respect—more economical, more dependable, yet it costs no more. Send the coupon for complete description and price.

The Hydraulic Press Manufacturing Company

Makers of Mount Gilead Hydraulic Cider Presses—famous since 1877

Mount Gilead

HIGH PRESSURE POWER SPRAYERS



No. 75-4½ is a smaller outfit of the same high efficiency as the No. 150-12 shown in the larger cut. Has a two-row Nixon type boom and Stover engine.

The Hydraulic Press Mfg. Co.

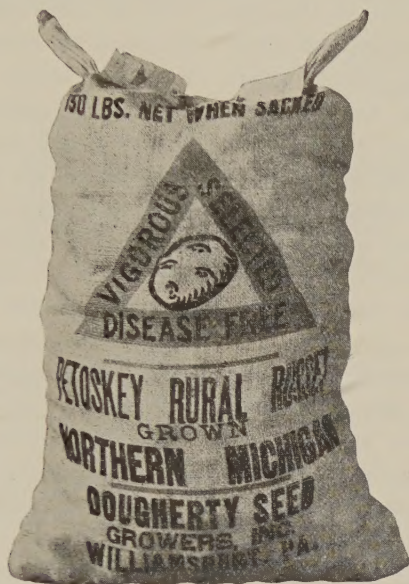
707 Lincoln Ave., Mount Gilead, Ohio

Please send me complete description and price of your Potato Sprayer.

Name

Address

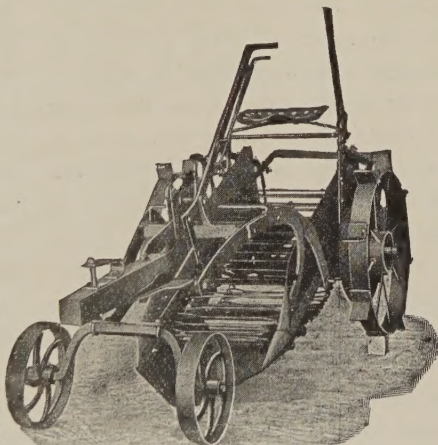
Membership in the Association on June 15th was 1067. Let's build this up to 1500 by the time of our annual meeting to be held at Harrisburg next January. We can easily do this if you men who are now members ask some of your neighbors to join with us. All they need to do is send \$1.00 to the Secretary, Miles Horst, 309 Telegraph Building, Harrisburg, Pa. Membership will entitle them to all the issues of the Guide Post.



FARQUHAR POTATO DIGGERS

INCREASE PROFITS

The Farquhar Elevator Digger contains every modern device for rapid, clean digging. Puts the potatoes in a neat, compact row, ready for easiest and quickest handling. They have been proven right by the hardest kind of field operation.



The Farquhar is the original rigid tongue digger—can be backed, held over the row when digging on hillside—and is light of draft. Built with broad front roller or two wheel front truck. May be equipped with level or hillside cleats; also road rim.

We also build the "Success Junior", the plow type digger for the smaller grower—the average farmer's choice. Illustrated Catalog sent to any grower.

A. B. FARQUHAR CO., Limited, BOX 260 YORK, PA.

POTATO SITUATION

The price of potatoes ruling throughout the United States during the latter part of June tells the story of the potato situation in this country. On June 22nd potatoes were loaded on the Eastern Shore, Maryland, at \$1.75 to \$1.85 per barrel as compared to \$5.25 per barrel a year ago. The abundance of supply on our markets as compared to a year ago were largely responsible for this difference in price.

Two factors have been responsible for heavy June shipments. One is the fact that, due to early freezes and cold wet weather in southern states, shipments of potatoes from our early producing states started from two to three weeks late. The result has been that there has been an overlapping lately of potatoes from the early states with those from the second-early states. The reports show that on June 22nd, for example, the carload shipments of early potatoes in the country were just twice as large as they were a year ago. A second factor that brought about bigger shipments in June as compared to a year ago were the larger stocks of old potatoes coming to the market during this period. Up to June 16th late potato producing states shipped 199,905 cars of late potatoes as compared to 180,636 cars of the 1926 crop. It is estimated that the hold-over of the 1927 crop was 97,000,000 bushels compared to the 84,000,000 last year, and this excess kept on coming during the latter part of the shipping season.

It is difficult to predict what will happen to the potato market during the next month or two. The U. S. Department of Agriculture states that present

prospects indicate only a fairly good crop of early and mid-season potatoes but while the acreage has been generally increased unfavorable weather conditions early in the season in many districts did not permit an increase of yield proportionate to the heavier plantings.

It is estimate that the combined total acreage of early shipping states is 264,430 acres compared to 238,000 last year and 199,000 three years age, and of the second-early states the acreage is 118,530 as compared to 108,000 in 1927. The condition of the crop in the states including Maryland, New Jersey, Kentucky, Arkansas, Kansas and Nebraska is estimated at different ratings by different authorities, but it is the concensus of opinion that the yield per acre will be slightly less than it was last year.

At the request of a number of produce shippers, the Pennsylvania Bureau of Markets has drawn up a bill which will be presented to the next Legislature, a bill which if passed will make it necessary for all Commission men doing business in Pennsylvania, to be licensed under the Pennsylvania Department of Agriculture and at the same time be required to take out a surety bond of \$3000 as a guarantee for faithful returns to shippers.

While most Commussion men doing business in the State today have proven themselves honest in their dealings with shippers there have been a certain number whose transactions have not been satisfactory. It is to guard the shipper against this latter group that the bill is proposed. Potato growers will do well to stand behind its passage.

*You pay once only
for any Concrete
Farm Improvement*

Farm Storage Cellar Will Pay for Itself

Have you ever had the experience of trying to sell apples, potatoes and other crops when everyone else was trying to do the same thing?

Markets glutted at harvest time often knock the profits out of a season's efforts.

Why not arrange to store some of your crops so they can be marketed in accordance with demand?

Here's where the concrete storage cellar comes in. Many a farmer who has one can tell you that its total cost was returned to him the first year by being able to take advantage of marketing conditions when they were most favorable.

You can easily build a storage cellar or other concrete improvements on your farm by following a few simple directions. Let us send you a free copy of our booklet "Plans for Concrete Farm Buildings." Write for it today.

PORTLAND CEMENT ASSOCIATION

1315 Walnut St.
PHILADELPHIA

*A National Organization to
Improve and Extend the Uses of Concrete*

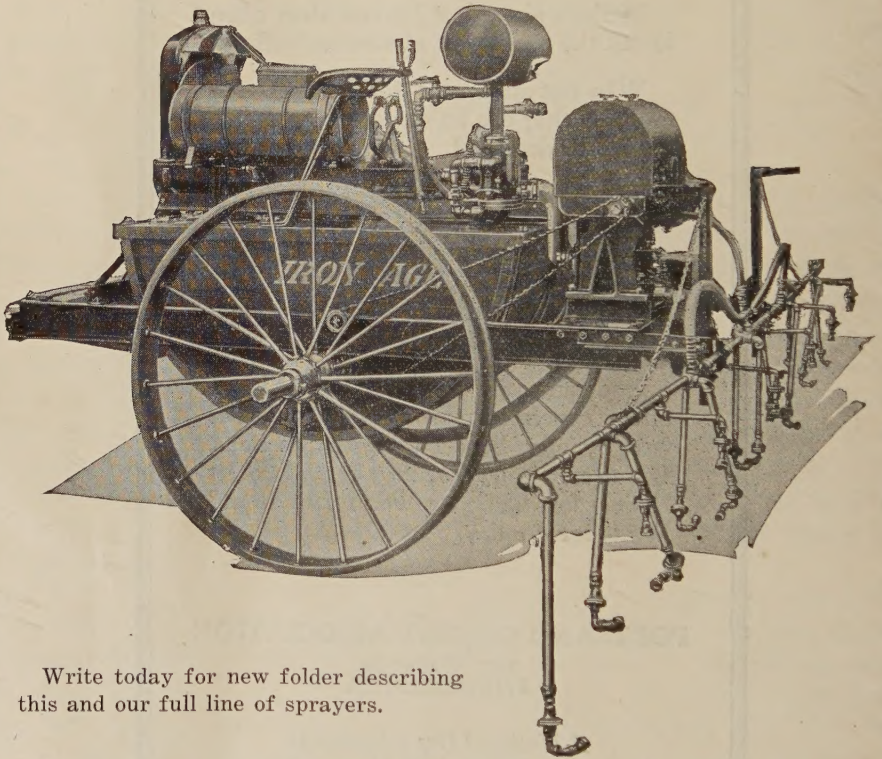
Offices in 32 Cities

IRON AGE

No. 360 Combination Field and Orchard POWER SPRAYER

**400 lbs. pressure—Self-Oiling, Dust-Proof
POWERFUL PUMP**

6 Row Spray Boom. Perfect Balance.
150 Gallon Underslung Tank—Low Center of Gravity
Equipped for Ford Motor—Model T.
Ford service and parts easily obtainable everywhere.



Write today for new folder describing
this and our full line of sprayers.

FRED. H. BATEMAN COMPANY

608 Chestnut Street—Public Ledger Building
PHILADELPHIA, PENNA.